

IN THE CLAIMS

1-6. (Cancelled)

Claim 7 has been amended as follows:

7. (Currently Amended) An implantable heart stimulator comprising:

a heart signal detector connected to a cardiac lead having an electrode adapted to detect electrical ~~a heart signals~~ signal originating from either a ventricle or an atrium;

at least two detection channels connected to said heart signal detector for receiving said electrical heart ~~signals~~ signal from said electrode;

each of said detection channels comprising a bandpass filter ~~having a filter characteristic~~, which emits a bandpass filtered signal at a filter output, a threshold detector which compares said bandpass filtered signal to a threshold and which generates a threshold detector output signal if said bandpass filtered signal exceeds said threshold, and a peak amplitude determining unit connected to the output of said bandpass filter which generates a peak amplitude value of said bandpass filtered signal;

the respective bandpass filters in said at least two detection channels having different passbands from each other, and each of said detection channels being continuously active; and

a heart event identifying unit connected to the threshold detector and the peak amplitude determining unit in each of said detection channels which unambiguously identifies, by applying predetermined heart event identifying criteria to the threshold detector output and the peak amplitude

value from each of said detection channels, a type of the electrical heart signal detected by said heart signal detector.

8. (Previously Presented) An implantable heart stimulator as claimed in claim 7 wherein said heart event identifying unit employs heart event identifying criteria selected from the group consisting of a quotient of respective peak amplitude values from two of said detection channels and a difference between respective peak amplitude values from two of said detection channels.

9. (Previously Presented) An implantable heart stimulator as claimed in claim 7 comprising three of said detection channels, said three detection channels containing respective filters with respective filter characteristics tuned to be sensitive to R-waves, T-waves and PVCs.

Claim 10 has been amended as follows:

10. (Currently Amended) An implantable heart stimulator as claimed in claim 7 comprising three of said detection channels, and wherein the respective bandpass filters in said three detection channels have respective ~~filter characteristics~~ passbands tuned to be sensitive to P-waves, a premature atrial contraction and far-field R-waves.

Claim 11 has been amended as follows:

11. (Currently Amended) An implantable heart stimulator as claimed in claim 7 wherein said heart event identifying unit comprises a tuner control connected to the respective bandpass filters in said at least two detection channels for tuning said respective bandpass filters.

12. (Previously Presented) An implantable heart stimulator as claimed in claim 7 wherein said heart event identifying unit employs identifying criteria for identifying types of electrical heart signals selected from the group consisting of R-waves, T-waves, premature ventricular contractions, P-waves, and far-field R-waves.